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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,494	12/14/2001	Bill Kwong	BHT-3092-254	9991

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BRUCE H. TROXELL
SUITE 1404
5205 LEESBURG PIKE
FALLS CHURCH, VA 22041

[REDACTED] EXAMINER

EDWARDS, ANTHONY Q

[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

2835

DATE MAILED: 04/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/014,494	KWONG ET AL.
	Examiner Anthony Q. Edwards	Art Unit 2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-7 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-7 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1.) Certified copies of the priority documents have been received.
 2.) Certified copies of the priority documents have been received in Application No. _____.
 3.) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) The translation of the foreign language provisional application has been received.
 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "20" and "30" have both been used to designate the hard disk cartridge housing. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 is rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

Note also that claim 5, which is dependent on claim 1, does not have proper antecedent basis for the term "the female IDE connector", recited in line 6, because the female IDE connector is first mentioned in claim 2, not claim 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States and,

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaczeus et al. U.S. Patent No. 6,154,360. Referring to claim 1, Kaczeus et al. disclose a hard disk drive (HDD) cartridge as claimed. See FIGS. 1 and 2 and respective portions of the specification. Kaczeus et al. disclose a hard disk cartridge containing a hard disk (115) and connecting to an I/O port of a personal computer by an interface cable (165), comprising a hard disk connecting board (135) and a “universal hard disk cartridge housing” (120/125) for removable placement of the hard disk within the housing.

Referring to claim 2, Kazeus et al. disclose a hard disk cartridge, wherein the hard disk connecting board further comprises a female IDE Connector (130) designed to have the same pins as the pins of a male IDE connector; a MC-36 female connector (145) for connecting to a MC-36 male connector of the interface cable (165), a power input jack (150) for providing power to the hard drive, and a printed circuit board (140) designed to have the same width as the width of the hard drive. See FIG. 3 and respective portions of the specification.

Referring to claim 7, Kaczeus et al. disclose a hard disk cartridge as claimed, wherein the interface cable (165) may be designed to connect to different ports, such as a PCMCIA interface cable. See column 3, lines 60-66.

Claims 1 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Chee et al. U.S. Patent No. 6,324,054. Chee et al. disclose a hard disk cartridge as claimed. See FIG. 8 and respective portions of the specification. Chee et al. disclose a hard disk cartridge containing a hard disk (200) and connecting to an I/O port of a personal computer by an interface cable (not shown, comprising a hard disk connecting board (250) and a “universal hard disk cartridge housing” (600) for removable placement of the hard disk within the housing.

Referring to claim 5, Chee et al. disclose a hard disk cartridge as claimed, wherein the cartridge housing (600) has an inside width the same as the width of the hard drive (200) and an inside height the same as the total thickness of the hard drive plus the printed circuit board (250).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaczeus et al.

Referring to claim 1, Kaczeus et al. disclose a hard disk cartridge as claimed. See FIG. 3 and respective portions of the specification. Kaczeus et al. does not expressly disclose the cartridge housing having an ejector button. Examiner takes Official Notice that such construction is

conventional and well known. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the hard disk cartridge switch to include a ejecting button for removing the HDD from the cartridge, because such construction is conventional.

Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chee et al. See FIGS. 9-13 and respective portions of the specification. Referring to claim 4, Chee et al. does not expressly disclose a cartridge housing that is 50% to 100% the length of the printed circuit board. FIG. 10 of Chee et al. does show, however, a cutout edge 654 positioned behind a connector. This edge can theoretically be reduced in size to 50% or for that matter increased to 100% the length of the printed circuit board. As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cartridge housing to the dimensions recited in the claim allow for a variety of disk sizes.

Referring to claim 6, Chee et al. does not expressly disclose a label applied to the top surface of the HDD identification purpose. As mentioned above, a cutout edge 654, positioned behind a connector, is disclosed in FIG. 10 of Chee et al., which is large enough to apply a label to the top surface of the hard drive (200) to quickly identify the content of the hard drive. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cartridge housing so that a label may be placed on the HDD for identification purposes.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S Patent Numbers 5,406,450 and Re. 36,968 disclose portable HDD connectors with female IDE connector designed to have the same pins as the pins of a male IDE

connector, a MC-36 female connector for connecting to a MC-36 male connector of the interface cable, and a printed circuit board have substantially the same width as the width of the hard drive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Q. Edwards whose telephone number is 703-605-4214. The examiner can normally be reached on M-F (7:30-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (703) 308-4815. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 306-5511 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-9929.

aqe
March 27, 2003

DARREN SCHUBERG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800